THE EFFECT OF FOLK GAMES-BASED TEACHING LEARNING MATERIAL (TLM) IN SOCIAL SCIENCES ON THE CREATIVE PROBLEM SOLVING, HAPPINESS, AND ACADEMIC ACHIEVEMENT OF UPPER PRIMARY STUDENTS

A

SYNOPSIS

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In

Education

Submitted by

Jagriti Singh

Under the supervision of

Dr. Neha Jain

Dept. Pedagogical Sciences

Faculty of Education

Dept. of Pedagogical Sciences, Faculty of Education

Dayalbagh Educational Institute (Deemed to be University)

Dayalbagh Agra 282005

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INTRODUCTION

Recent educational trends indicate that for increasing the student participation and to improve the learning process, teaching methods need to be changed. Collaborative methods and social activities among students promote participation of students in learning with the help of sharing ideas and responding to others' reactions which results in sharpening their thinking and deepening understanding. The methods based on learning by doing are helpful in the understanding theoretical part along with the practical exercises. The achievement of the students is highly governed by the use of innovative methods of teaching. The teaching methods which aimed towards the all-round development of students are always considered as the good methods but it is not easy to integrate all kinds of development in a single method so it is still a researchable area in the field of education for making teaching interesting and meaningful. "More important than the curriculum is the question of the methods of teaching and the spirit in which the teaching is given" Bertrand Russell (2014). The inductive method, problem-solving, and heuristic are the methods that focus on the cognitive development of students while cooperative methods are based on the development of the affective domain.The project method, role play, and learning by doing are examples of methods that focus on the psychomotor domain. So, we have various methods but at present time we need to implement the methods which focus on the blend of all kinds of development. Gamification can lead to high levels of learner engagement and motivation as children generally take interest in playing games. Houghton et al., (2013) discussed educationalgames as the utilization of games to support teaching and learning. Games can be used as a support tool to complement traditional teaching methods to improve the learning experience of the learners while also teaching other skills such as following rules, adaptation, problem-solving, interaction, critical thinking skills, creativity, teamwork, and good sportsmanship.

At present time students are more involved in computer games rather than traditional games. To connect ancient games with education, different educational policies have always thrown light on the importance of integrating traditional sports into education for the development of the psychomotor domain. It also aims to appreciate the cultural values which can be seen in the recommendations of some commissions such as:

The secondary Education Commission (1952-1953) recommended dynamic and scientific methods

for teaching various subjects like English, science, social science, art, craft, music, and physical science. Activity method and Project method of teaching were also suggested by this commission.

Kothari Commission (1964-1966) focused on work experience and experimental curriculumin schools.

National Education Policy (1986) recommended skill-oriented education; art education for the development of aesthetic sense. Scientific and technical education including work experience were also promoted for psychomotor skill development. It was suggested to promote students to play different games not only at the school level but also at state levels thus the focus should be laid on all-around development (academics, sports, values, and morals).

National Curriculum Framework (2000) recommended group learning through the integration of art education (visual and performing), and health and physical education (sports and games).

National Curriculum Framework (2005) recommended making the subject boundaries softened to lead the integrating knowledge and understating. Textbooks and other materials should incorporate local Knowledge and traditional skill. Schools should provide a stimulating environment based on their community.

According to New Education Policy (2020)*"All curriculum and pedagogy, from the foundational stage onwards, will be redesigned to be strongly rooted in the Indian and local context and ethos in terms of culture, traditions, heritage, customs, language, philosophy, geography, ancient and contemporary knowledge, societal and scientific needs, indigenous and traditional ways of learning, etc. – to ensure that education is maximallyrelatable, relevant, interesting, and effective for our students. Stories, arts, games, sports, examples, problems, etc. will be chosen as much as possible to be rooted in the Indian and local geographic context. Ideas, abstractions, and creativity will indeed best flourish when learning is thus rooted".*

In India, one of the initiatives of Toycathon (2021) was taken by the Honorable Prime Minister of India P.M. Modi. The objective of Toycathon was to invite innovative minds from India to design new toys and games based on the history, civilization, ethics, and culture of India. It offers our students to allow designing toys and games that will help India to become a global center for toys and games and help our children to understand the ethics and values of Indian culture whose need has been analyzed in the New Education Policy (2020). The Toycathon was based on some themes such as Indian culture,

history, knowledge of India and Ethos, social and human values, learning, education and schooling, occupation and specific fields, environment, diving, fitness and sports, creative and logical thinking and rediscovering/redesigning traditional Indian toys. We can make a meaningful integration of it in the field of education by promoting folk games in the teaching-learning process.

According to *Nargiza Isaqova (2021),* National games always played an educational function in all societies. Through folk games, we can organize teaching and learning activities in a way promoting knowledge development as well as the feeling of healthy competition to develop a person both physically and mentally.

Folk games provide an opportunity for everyone to participate. It is the most democratic way of involving students in learning in the form of a new methodology. Folk reflects the way of living of people, work, national foundations, ideas of honor, courage, and the desire to possess physical strength and intelligence. The people who are participating in the game should have shown qualities such as agility, endurance, quicknessand beauty of movements, ingenuity, creative invention, resourcefulness, striving for victory, and collectivism. In children's folk games, there is a lot of humor, jokes, and competitive enthusiasm. “Movements are often accompanied by unexpected, funny moments, tempting and beloved children counting rhymes, drawing lots, nursery rhymes. They retain their artistic charm, and aesthetic value and constitute the most valuable, unique folklore. Through the game, a child may have the opportunity to learn such senses as touching, seeing, smelling, listening, and tasting. In this way, more permanent and natural learning occurs". (Yazici- Ersoy, 2010). A child learns desirable behaviors, knowledge, and skills necessary for life in a game autonomously (Aksoy, 2014). Games meet almost all necessities and is an effective source to ease the unity with the outer world, enables the child to know his environment, explore it, improve his abilities through new experiences, express his emotions and thoughts, communicate with his environment, and to adapt himself to social roles. In this sense, the child relaxes through the game and continues his personal development through his position among the people. The game help child to know themselves and get aware of the characteristics that separate them from other people (Arslan, 2000). Folk Game-based learning (FGBL) originated from the idea of including traditional games in the educational process which aims to enhance learning activities through an interesting medium to attract students' attention and interest in the subject. The folk game-

based learning (FGBL) scenario can place learners in an interactive, creative Problem-solving context, and promotes critical thinking, communication, collaboration, and adaptability to functional knowledge acquisition. Therefore, Folk Game-based learning can motivate students to actively deal with educational content, promote the development process of children's awareness, and improve students' experience, self-efficacy, and satisfaction in a similar learning environment. Although games play a beneficiary role in the learning process, there are significant gaps between theory and practice due to different implementation obstacles. Effective integration of games into education plans is required to create the topics-specific game to be used in different classes.

India has a very rich cultural heritage. This includes diversity in cultural dance, song, music, language, fine art painting, sculpture, costume, and even game culture. According to Vivi Wijayanti in her periodical "Dolan Anak Dalam Masyarakat Jawa" (2000). The existence of Indian children's folk games is not just ordinary games but contains important significance.

In today's era students face many challenges in their life related to personal, academic, social,and emotional aspects. So, these problems can be solved by them differently as per the level of problem-solving skills. This problem-solving can be based on various skills like logical reasoning creativity etc. Creative problem-solving skills can be a unique skill they have. Creative Problem-solving is one of the most important skills for school-age children. Playing games may become one of the attractive strategies for teachers and educators to improvetheir creative Problem-solving skills (Moursund, 2016). Use of Game in teaching learning process can be used as one of the teaching strategies to help students in improving their creative Problem-solving skills and critical thinking skills (Treadwell, Smith & Pratt, 2014).

Folk games represent the richness of local culture and do not require a lot of money. Folk games can also promote the social values of children because they play in groups. Various values of local wisdom were discovered in various folk games, such as social value, physical movement development, various problem-solving skills, Strategy formulation, and creativity. Other than containing high social worth, folk games are advantageous in working on psychomotor, intellectual, and social abilities. From the psychomotor viewpoint, folk games can prepare the sensory-motor, adaptability, perseverance, gross engine, and fine engine abilities. Moreover, folk games are additionally more powerful than everyday

exercises in working on children's essential development abilities (Akbari et al., 2009). Besides, the intellectual benefits, folk games can create the creative mind, inventiveness, critical thinking, technique, expectation, and logical agreement. While the social advantages of folk games can further develop collaboration, connection building, and social development preparation with peers. Folk games have characters that are ready to raise bliss just as the support of the children and to further develop basic development abilities since it has a component of play. Playingis the children's world. They play while they learn. Playing is an unconstrained movement with no weight, what's more, restricting guidelines. While playing, the children investigate and discover and discriminate between right and wrong. This becomes a decent office for the children to foster themselves, regardless of whether in their enthusiastic, social, physical, or their scholarly turn of events. For the children, playing is the primary objective where they play using their body and kinesthetic abilities. In addition, playing can additionally be gainful for the children's cognizance, body, and feeling in providing a game-based learning setting, an instructor will make a learning arrangement plan with the goal that the objective in the learning system can be accomplished.

Folk games can have the capability of increasing happiness, as well as the involvement of children and improving basic movement skills. Playing is a spontaneous activity without any burdens or binding rules. As children play, they explore and find the things that make them proud. This can be a great way for children to develop, be it in their emotional or social environment, Physical or mental development. Games and simulations show mixed effects across some sectors, such as student performance, academic achievement, engagement, and learning motivation. The issue of efficiently integrating games and simulations in the educational process is often up to the instructor's discretion.

JUSTIFICATION OF THE PROBLEM

The aim of education is all round development of child, which includes mental, physical, social, emotional development etc. This development cannot be done in isolation. Mental development requires good physical health "the creation of sound mind in a sound body" (Aristotle, 1903). It is the need to integrate various physical activities while teaching various course to enhance the active participation of student in class. In ancient times more preference was given to the teachers-centered approach and at that time no freedom has been given to students so the education given by the teachers was considered

standard education. As time changed education became more oriented towards pragmatism. The need for pragmatism has been seen in today's era because of changing needs of society. So, in the present time, education has shifted its paradigms from teacher-centered to student-centered education. In this type of education, students play an important role and the teachers have to work for the development and growth of every student in the classroom by respecting them differences. To promote such kind of education, the student must be motivated to learn. The curriculum should be reframed in such a manner that the burden of education can be reduced and joyfully promote the teaching.

Presently our prime minister is focusing a lot on the use of games and sports due to increase of students' involvement in technology and gadgets-based games by ignoring their health and fitness. Toycthon (2021) aims to develop games/toys based on Indian civilization, heritage, culture, mythology, history, ethos, technology, ethnicity, national heroes and important events, through which teachers can teach the difficult concepts of Mathematics, Science, Language, Social Science in effective way which will result towards the inculcation of positive behavior, good values, national integration and respect for cultural diversity in the students. Their dependence on gadgets and technology has taken them away from their traditional value and cultural behind, so this type of learning is very crucial for material development in present times. The new educational policy 2020 also focuses on teaching through folk games. Some innovative research has been conducted in these fields which are as follows:

Table No. 1: Review of Related Literature

S.No.	Researchers ↓ / Variables Of the Study →	Folk game	Creative problem solving	Happiness	Academic Achievement	Results
1.	Kamid, et al. (2022)	✓				**TOPIC**: Investigating the Role of Traditional Games in Developing Students' Process Skills and Interest in Learning mathematics **RESULT: S**tudent's interest influences their skills. Traditional game of marbles made the student's understanding better in Mathematics.

2.	Yingying Jiang (2022)			✓		**TOPIC:** Happiness in University Students: Personal, Familial, and Social Factors: A Cross-Sectional Questionnaire Survey **RESULT:** The research identified several key personal, familial, and social factors influencing university student happiness, which can provide an effective measure to improve their happiness.
3.	Amalia E. Roldan and Nimfa B. Pastrana			✓	✓	**Topic:** Doing act of kindness to enhance subjective happiness: correlates of academic success **RESULT:** The result shows that the difference on the subjective happiness of the respondents before and after the intervention program is significant. Thus, the intervention program is effective. There is significant relationship between the respondents' subjective happiness and academic achievement in Psychology class. Results depict that happiness is a correlates of students' academic success.
4.	Ismail Kilic and Ozkan Gurbuz (2022)				✓	**TOPIC:** The effect of educational game activities applied on the academic achievement of secondary students in science education **RESULT:** the result shows that the Educational Game Activities used in the science course have a positive effect on academic achievement.
5.	Dwi Hartanto et al. (2021)	✓				**TOPIC:** Integrating Social Skills in Traditional Games with Physical Education Interventions **RESULT:** Traditional games that are integrated with physical education and contain social elements have a greater impact on the social skills of elementary school.
6.	Nipaporn Khamcharoen et al. (2021)		✓			**TOPIC**: Creative Problem-Solving Skill Components of Undergraduate Students **RESULT:** Result shows that the Component Model of Creative Problem-Solving Skill of Undergraduate Students Was Harmoniousness with Empirical Data That Means the Developed Component Model Can Explain the Component Model of Creative Problem-Solving Skill of Undergraduate Students.
7.	N.S.W. Gunasekara and A.J. Jayasekara (2021)			✓	✓	**TOPIC:** The impact of happiness on the academic performance of undergraduates. (An investigation of undergraduates of the faculty of humanities and social sciences, university of ruhuna, sri lanka) **RESULT**: Finally found that there is a positive impact of happiness on the academic performances of Undergraduates.
8.	Furkan Kasikci and Metmet Bugra Ozhan (2021)			✓	✓	**TOPIC:** Prediction of Academic Achievement and Happiness in Middle School Students: The Role of Social-Emotional Learning Skills **RESULT**: Result of the study indicated that there were positive and significant correlations between social-emotional learning skills and academic achievement and happiness. In addition, social-emotional learning skills were a significant predictor of academic achievement and happiness in middle school students.
9.	Anahy Rojas Mauri et al. (2021)			✓	✓	**TOPIC:** Happiness and academic performance in students of the degree in pedagogy **RESULT:** The results of three happiness factors show

						that the population is at a low level: a positive life-sense, a life-satisfactory and a joy-of-life. At the medium level, the Personal Achievement As far as the Pearson Correlation is concerned, a high correlation is detected between the happiness variable and the academic performance.
10.	Cynthia Leung et al. (2021)			✓	✓	**TOPIC:** Predictors to Happiness in Primary Students: Positive Relationships or Academic Achievement **RESULT:** The result indicate that the girls reported higher levels of academic achievement when they perceived better peer relationship than did boys, and girls were happier when they had higher levels of academic achievement than were boys.
11.	Jing Tian et al. (2021)			✓	✓	**TOPIC:** College Satisfaction, Sense of Achievement, Student Happiness and Sense of Belonging of Freshmen in Chinese Private Colleges: Mediation Effect of Emotion Regulation **RESULT:** The result identified the significant positive associations between freshmen's emotion regulation and sense of belonging. In particular, emotion regulation plays a mediating role in the relations between college satisfaction, sense of achievement, student happiness, and the sense of belonging.
12.	Mare van Hooijdonka et al. (2020)		✓			**TOPIC:** Creative Problem Solving in Primary Education: Exploring the Role of Fact Finding, Problem Finding, and Solution Finding across Tasks **RESULT:** The results indicate that when aiming for more and original solutions, teachers could embed fact finding and problem finding in their CPS teaching practices. Our results also indicate primary school students are able to recognize creativity.
13.	Fita Permata Sari et al. (2020)	✓				**TOPIC:** Physics comics learning media based on Engklek traditional games on parabolic motion topics to improve creativity **RESULT:** The result this research is physics comics learning media based on Engklek traditional games in the parabola motion topics to improve creativity can disseminate to students for physics learning process outside and inside the school.
14.	Juliet Ruth D. Mozar (2020)	✓				**TOPIC:** Enhanced Curriculum with the Integration of Indigenous Game to Physical Education in the different State Universities and Colleges (SUCs) in CARAGA Region, Philippines **RESULT:** These results shows that as to Agility, Coordination, and Cardiovascular endurance, the students' performance does not significantly differ regardless whether they are doing indigenous games or traditional PE activities. Further, these also suggest that when testing these three components, the teacher can substitute the indigenous games to their counterparts in traditional PE activities.
15.	Hana Sakura Putu Arga et.al. (2020)	✓				**TOPIC:** Improvement of Creative Thinking Ability of Elementary Teacher Education Students in Utilizing Traditional Games in Social Studies Learning **RESULT:** This research shows that learning science

						by applying traditional games can improve elementary teacher education students' creative thinking skills. It can be seen from the learning outcomes of elementary teacher education student's social studies using traditional games that are better than conventional learning.
16.	Mare van Hooijdonka et.al. (2020)		✓			**Topic:** Creative Problem Solving in Primary Education: Exploring the Role of Fact Finding, Problem Finding, and Solution Finding across Tasks **RESULT:** the results indicate that when aiming for more original solutions, teachers could embed fact-finding and problem-finding in their CPS teaching practices. Our results also indicate primary school students can recognize creativity.
17.	Kai Ruggeri et.al. (2020)			✓		**TOPIC:** Well-being is more than happiness and life satisfaction: a multidimensional analysis of 21 countries **RESULT:** The ten dimensions assessed are used to compute a single value standardized to the population, which supports broad assessment and comparison. It also increases the possibility of exploring individual dimensions of well-being useful for targeting interventions. Insights demonstrate what may be masked when limiting to single dimensions, which can create a failure to identify levers for policy interventions.
18.	Teresa Pozo-Rico and Ivan Sandoval (2020)				✓	**TOPIC:** Can Academic Achievement in Primary School Students Be Improved Through Teacher Training on Emotional Intelligence as a Key Academic Competency? **RESULT:** The result Implementation of EI into classroom teaching effectively improved academic achievement in primary school students using both methods. However, there was a greater increase in academic achievement and higher teacher satisfaction in the game-based e-learning group. No significant differences in student achievement were observed in the control group.
19.	Lucía Herrera et.al. (2020)				✓	**TOPIC:** Academic Achievement, Self-Concept, Personality and Emotional Intelligence in Primary Education. Analysis by Gender and Cultural Group **RESULT:** The result based on the objectives set, first, the grades in the subject of Spanish Language and Literature varied depending on the gender of the students. Likewise, differences were found in self-concept, personality, and emotional intelligence according to gender. Also, the physical self-concept varied according to the cultural group. Regarding the second objective, in the predictive analysis for each of the subjects of the curriculum of Primary Education, the academic self-concept showed a greater predictive value.
20.	GopikaUnni P (2020)	✓				**TOPIC:** Locating the Cultural Transmission in Games: An Analysis of Select Folk games and Digital games

						RESULT: The result shows Kerala folk games from distinguished categories which have receded its significance or are in the merge of extinction. It also analyses the contemporary cultural transmission within the context of folk games in comparison with the globalization.
21.		✓			✓	**TOPIC:** The effectiveness of traditional game-based communication Learning activity for cognitive process dimension learning Achievement **RESULT:** There is a difference in the students' learning achievement which shows that the implementation of the scientific approach in the learning activity of communicating based on traditional games has a positive effect on the learning achievement of the fourth-grade students.

After analyzing the above-related literature, a researcher found that many researchers have been conducted to study the effect of Game-based material on motivation, self-confidence, learning style, intelligence, personality, happiness, etc. The effect of traditional games has been studied at a primary level of education in various countries. It is also found that Creative Problem Solving, Happiness, and Academic Achievement have been studied about various independent variables like gender, mortality, various courses of studies, etc. The impact of these three variables has also been studied on some dependent variables like social being, morality, individual differences, anxiety, intelligence, social cognition, etc. No research work has been done by taking folk game-based teaching learning material in social sciences, creative problem solving, happiness, and academic achievement altogether in a single study. So,for filling this gap, the researcher has decided to conduct research aimed to investigate the effectiveness of Folk games-based material in social science on the creative problem-solving, happiness, and academic achievement of upper primary students.

RESEARCH QUESTIONS

The following research questions have been arising:

1. Does Folk game-based Teaching learning material of social science effective for developing creative problem-solving in upper primary students?
2. Does Folk game-based Teaching learning material of social science effective for enhancing the happiness of upper primary students?
3. Does Folk game-based Teaching learning material of social science effective for increasing the Academicachievement of an upper primary student?

4. What is the interaction effect of folk game-based teaching learning material and gender on creative problem solving, happiness and Academic achievement of upper primary student?

STATEMENT OF THE PROBLEM

To find out the answer to above mention research questions, the following problem can be selected below:

"The Effect of Folk Games-Based Teaching Learning Material (TLM) in Social Sciences on the Creative Problem Solving, Happiness, and Academic Achievement of Upper Primary Students"

OBJECTIVES OF THE STUDY

The present study will include the following objectives:

1. To study the effect of the folk game-based teaching learning material in social sciences on creative problem solving of upper primary students.
2. To study the effect of gender on creative problem solving of the upper primary students.
3. To study the interactional effect of the folk game-based Teaching learning material and gender on creative problem solving of the upper primary students.
4. To study the effect of the folk game-based Teaching learning material in social sciences on happiness of the upper primary students.
5. To study the effect of gender on the happiness of the upper primary students.
6. To study the interactional effect of the folk game-based Teaching learning material in social science and gender on happiness of the upper primary students.
7. To study the effect of the folk game-based Teaching learning material in social sciences on academic achievement of the upper primary students.
8. To study the effect of the gender on academic achievement of the upper primary students.
9. To study the interactional effect of the folk game-based Teaching learning material in social science and gender on the academic achievement of the upper primary students.

HYPOTHESES

The present study aims to test the following hypotheses:

1. There is no significant effect of the folk game-based Teaching learning material in social sciences on the creativeproblem-solving of the upper primary students.

2. There is no significant effect of the gender on creative problem-solving of the upper primary students.
3. There is no significant interactional effect of the folk game-based Teaching learning material in social sciences and gander on the creative problem-solving of the upper primary students.
4. There is no significant effect of the folk game-based Teaching learning material in social sciences on the happiness of the upper primary students.
5. There is no significant effect of gender on the happiness of the upper primary students.
6. There is no significant interactional effect of the folk game-based Teaching learning material in social sciences and gender on the happiness of the upper primary students.
7. There is no significant effect of the folk game-based Teaching learning material in social sciences on the academic of the upper primary students.
8. There is no significant effect of gender on academic achievement of the upper primary students.
9. There is no significant interactional effect of the folk game-based Teaching learning material and gender onthe academic achievement of the upper primary students.

DEFINITIONS OF THE TERMS EMPLOYED

Definitions of the terms employed in the present study are laid down as follows;

Folk Games

According to Bresson, & Van Der Merwe, (1992) Folk games are those games within a society that people have played for many years because participation gives them a chance to practice something that has meaning within their society.

Operational definition

In the present study, the folk game are the games based on folk culture, characteristics and mobility. That games were played collectively in times when the feature and the possibility of entertainment was also limited. Some of these games are

Indian Folk Indoor Games: 1. Chaupar/Pachisi2.Pallankuzhi3. Gutte/ Five Stones 4. Lattoo 5. Antakshari 6. Samundar 7. Aao milo etc.

Indian Folk Outdoor Games: 1. Kancha 2. Nondi/Hopscotch 3. Gilli Danda/Lippa 4. Kabbadi 5. Satoliya/Pithoo /Lagori 6. Chain 7. Kho Kho 8. Hide and Seek/ Chhupam Chhupai 9. Dog and the Bone

10. Maram Pitthi 11. Imely 12. Langdi tang 13. Tug of war 14. Kida jamal khai etc.

Creative Problem Solving

Abraham Carmeli et al., (2013) Stated that the Creative Problem-Solving Skills (CPS) process emphasized the principle that each individual has creativity that is inherited and canbe expressed by each student on different levels of thinking and age.

Operational definition

In the present study, Creative Problem Solving (CPS) involves breaking down a problem to understand it, generating ideas to solve the problem, and evaluating those ideas to find the most effective solutions. It uses techniques to make the problem-solving process engaging and collaborative.

Happiness

According to Aristotle, Happiness are the meaning and the purpose of life, the whole aim, and the end of human existence.

According to Mahatma Gandhi (1922), Happiness is when what you think, what you say, and what you do are in harmony.

Operational definition

In this study happiness refers to a stage of the balance in positive and pleasant emotions such as joy, pride, contentment, gratitude for getting satisfaction in life.

Academic Achievement

According to Kell, lubski, and Benbow (2013), Academic achievement is the outcome of the education extent to which a student, teacher, or institution has achieved their educational goals.

Operational definition

In this study, Academic Achievement refers to the marks scored by a student in social sciences.

DELIMITATION OF THE STUDY

- The study will be delimited in the following point:
- The study will be delimited to Agra city only.
- The study will be delimited to the upper primary level.
- The study will be delimited to selected chapters of different branches of social sciences.
- The study will be delimited to the student of the C.B.S.E. board of education.

VARIABLES OF THE STUDY

The variables of the study have been classified as follows:

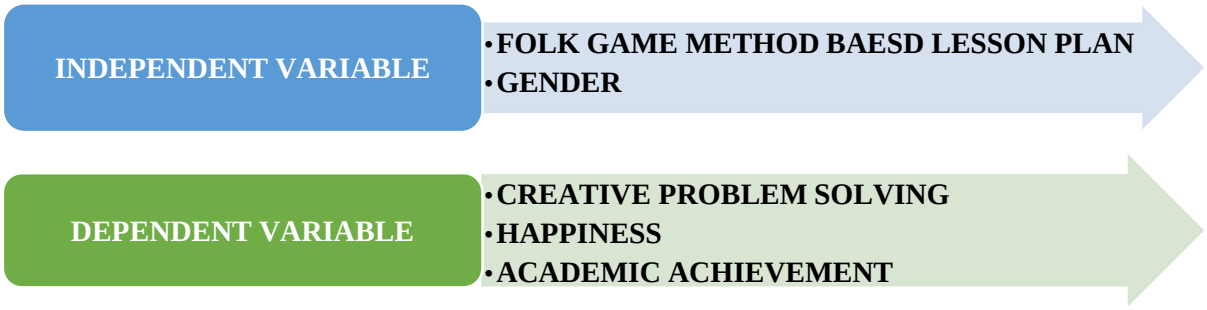

Figure 1: Variables of The Study

CONTROL OF EXTRANEOUS VARIABLES

The extraneous variance will be controlled by the identification of effective variables and using an effective strategy of control which has been shown in the table:

Table2: Possible Extraneous Variables and Techniques of control

Extraneous Variable	Technique of Control
A. Subject-relevant variable	
Age	Constancy (10-12)
Intelligence	Controlled by random sample selection Controlled by
Motivation	random sample selection
B. Situation-relevant variables	(These variables will be controlled to Best possible
providing similar conditions to student	theextent.)
Temperature	Constancy
Noise	Constancy
Lighting level	Constancy
Time of the study	Constancy

DESIGN AND PROCEDURE OF THE STUDY

The design and Procedure of the study will be as follows:

RESEARCH DESIGN

While considering the nature of the problem, Pre-test and Post-test Two Group Research Design will be used in the present study.

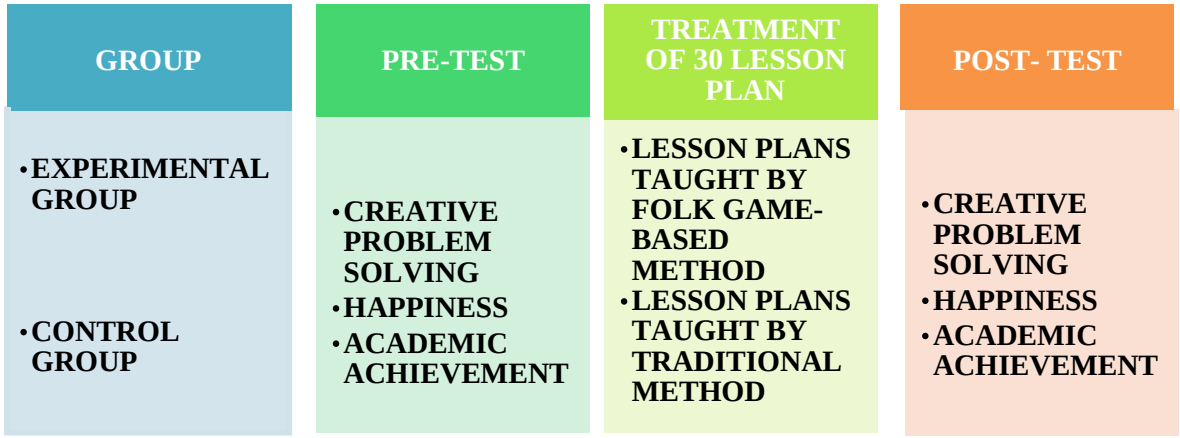

Figure.2: Research Design

PLAN AND PROCEDURE OF THE STUDY

The detailed procedure of the study has been given in three phases as follows:

PHASE 1: PREPARATORY PHASE

In the preparatory phase following activities will be done:

Content Analysis- Content analysis of class VII social sciences textbooks will be done toknow which chapter can be taught through Folk games.

Selection of chapter- After content analysis Chapters and topics will be selected from thesocial sciences textbook for developing Folk games based on teaching learning material.

Development of Folk Game-based teaching learning material- The researcher will develop instructionalmaterial based on the folk game method and the steps will be as follows:

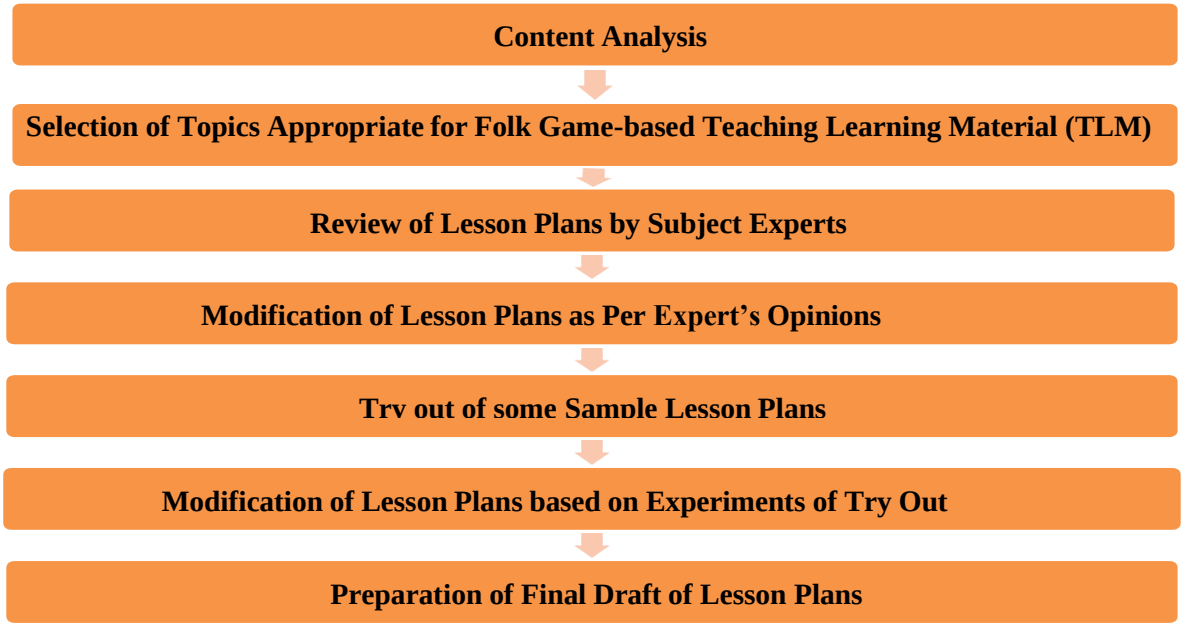
Content Analysis
Selection of Topics Appropriate for Folk Game-based Teaching Learning Material (TLM)
Review of Lesson Plans by Subject Experts
Modification of Lesson Plans as Per Expert's Opinions
Try out of some Sample Lesson Plans
Modification of Lesson Plans based on Experiments of Try Out
Preparation of Final Draft of Lesson Plans

Figure.3: Preparatory Phase

PHASE 2: CLASSROOM EXPERIMENTS

This phase will aim to introduce an intervention with the experimental group of learners. The intervention will involve the use of folk game-based Teaching learning material learning the social sciences subject. To see the effect of folk game-based Teaching learning material in social science on Creative Problem Solving, Happiness, and Academic Achievement, implementation of developed instructional material in upper primary class will be done. The researcher will select the experimental and control group members through Simple random sampling. After assigning groups researcher will teach the Experimental group with the help of Folk game-based material and the control group with traditional instructional material. The outcome will be compared to that of the control group of learners, taught the same topic, using the traditional approach.

PHASE 3: EVALUATORY PHASE

The effect of folk game-based Teaching learning material will be evaluated by implementing a test of post-achievement for the determination of creative problem-solving, happiness, and academic achievement.

METHOD OF THE STUDY

In this study quasi experimental research method will be used. According to Sugiyono (2012), the quasi-experiment research method is research used to determine whether something is imposed on the subject under investigation by looking for the effect of specific treatments on others under controlled conditions. It is understood that quasi-experiments see how researchers' actions impact whether the experiment will affect the research subjects.

As a process, the sample has been placed in two groups (1. Controlled group, 2. Experimental group). Under the pre-test on both groups, the dependent variables (Creative Problem Solving, Happiness, and Academic Achievement) will be assessed by appropriate instruments. After that, the experimental group will be taught with the help of folk game-based teaching learning material, the traditional method will be used for the teaching of the control group and finally, the dependent variables (Creative Problem Solving, Happiness, and Academic Achievement) will be tested once again under posttest. will be assessed by appropriate tools.

POPULATION OF THE STUDY

The population of this study consists of all upper primary students of Agra city.

SAMPLE OF THE STUDY

The process of sample selection is given below:

Selection of school: The selection of schools will be done by purposive sampling.

Selection of Class: After the selecting school the two sections of the VII class will be selected.

Selection of section: After selecting class assigned the student an experimental group and a control group through random sampling.

Selection of Students: The selection of students from both the section experiment and control group was done by random sampling.

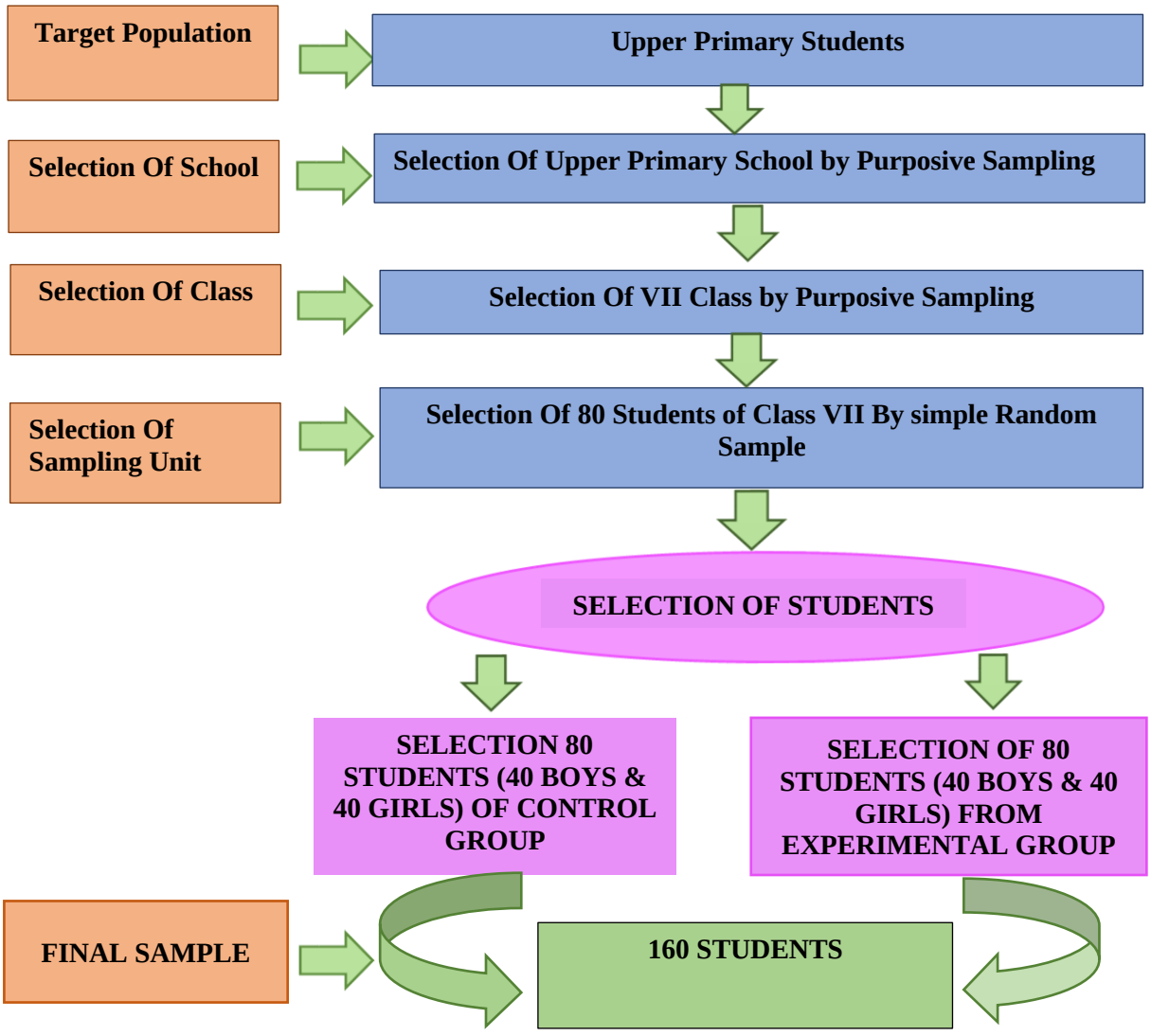
Target Population
Upper Primary Students
Selection Of School
Selection Of Upper Primary School by Purposive Sampling
Selection Of Class
Selection Of VII Class by Purposive Sampling
Selection Of Sampling Unit
Selection Of 80 Students of Class VII By simple Random Sample
SELECTION OF STUDENTS
SELECTION 80 STUDENTS (40 BOYS & 40 GIRLS) OF CONTROL GROUP
SELECTION OF 80 STUDENTS (40 BOYS & 40 GIRLS) FROM EXPERIMENTAL GROUP
FINAL SAMPLE
160 STUDENTS

Figure.4: Sampling Process

TOOLS OF THE STUDY

The following tools will be used in the present study:

Passi-Usha test of Creative problem solving by B.K. Passi and Usha Kumar (2015) will beused.

The happiness scale by R.L. Bhardwaj and P.R. Das (2017) will be used.

Self-constructed tool for Academic Achievement.

STATISTICAL TECHNIQUES

In the present study following statistical techniques will be used:

DESCRIPTIVE STATISTICS

Certain descriptive statistics will be used to describe the nature and distribution of the scores obtained on the various tests. So, following methods of statistical analysis will be usedin the present study:

Mean: The mean value will be computed as a measure of the central tendency of thedistribution of achievement scores.

Standard Deviation: This will be computed to study the variation in the scores and to doother various computations.

Graphical Representation of data

INFERENTIAL STATISTICS

ANCOVA: ANCOVA examines the difference in the mean values of the dependent variable that are related to the effect of the controlled independent variable.

Some other statistics will be used if the conditions of the experiment and analysis of data willdemand.

SIGNIFICANCE OF THE STUDY

The significance of the study is as follows:

- The findings of this study will lead to the cultural development of the students.
- This study will be significant because classroom learning will be modified by usingfolk game-based teaching learning material.
- The finding of this study will help fulfill the aim of the all-arounddevelopment of students.
- The findings of the study will spread awareness about the role of game-based Teaching learning material students' creative problem-solving, happiness, and academic achievement.
- The finding of the study helps to achieve the goal given by the new education policy in 2020.

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